A RARE CASE

OF

ADENO-MYXO-SARCOMA OF THE CERVIX UTERI.

BY

PAUL F. MUNDÉ, M.D.,

Professor of Gynecology at the New York Polyclinic and at Dartmouth College; Gynecologist to Mt. Sinai Hospital; Fellow of the Obstetrical Society of New York, and of the American, British and German Gynecological Societies; Corresponding Fellow of the Obstetrical Societies of Edinburgh and Philadelphia, and of the Gynecological Society of Boston.

[Reprinted from the AMERICAN JOURNAL OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN, Vol. XXII., February, 1889.]

NEW YORK:
WILLIAM WOOD & COMPANY, PUBLISHERS,
56 & 58 LAFAYETTE PLACE.
1889

A RARE CASE

OF

ADENO-MYXO-SARCOMA OF THE CERVIX UTERI.

BY

PAUL F. MUNDÉ, M.D.,

Professor of Gynecology at the New York Polyclinic and at Dartmouth College; Gynecologist to Mt. Sinai Hospital; Fellow of the Obstetrical Society of New York, and of the American, British and German Gynecological Societies; Corresponding Fellow of the Obstetrical Societies of Edinburgh and Philadelphia, and of the Gynecological Society of Boston.

Presented by the author.

[Reprinted from the AMERICAN JOURNAL OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN, Vol. XXII., February, 1889.]

NEW YORK:
WILLIAM WOOD & COMPANY, PUBLISHERS,
56 & 58 LAFAYETTE PLACE.
1889.

A RARE CASE

OF

ADENO-MYXO-SARCOMA OF THE CERVIX UTERI.

The rarity of the disease induces me to report the following case :

Early in November, 1888, I was consulted at my office by Dr. M. V. B. Dunham, of Southport, Conn., about the case of an unmarried lady of 19 years, a resident of a village near Southport, whom he had recently been called to see, and who presented a condition which puzzled him. He found an intensely anemic girl, confined to her bed by sheer debility, who for at least two years had suffered from a profuse watery vaginal discharge, the cause of which had never been ascertained, as she refused an examination. No regular menstrual discharge had occurred during that time. Dr. Dunham found the vulva and hymeneal opening widely distended by a slimy, friable tumor which he could grasp and feel to extend deep into and fill the pelvic cavity. While the slimy masses came away literally by the handful during this manipulation, an attempt to twist the growth with the hand revealed a firm interior structure and a solid attachment, and caused so much pain as to bring on a fainting-fit from which the patient gradually rallied. The doctor could not find any reference in literature to growths of this kind springing from the cervix uteri, and I confessed to him that a record of a case of probable myxoma of the size described by him was unknown to me.

As an early removal of the tumor was, of course, indicated, as soon as the patient had somewhat recovered from the examination Dr. Dunham notified me, and on November 23d, I proceeded to the patient's residence, and made a thorough examination under chloroform, and with the assistance of Drs. Dunham,

Osborne, and Higgins removed the tumor. I found that I could easily pass my whole hand into the vagina and encircle the tumor, which occupied the whole pelvic cavity from brim to outlet, and which apparently sprang from the centre of the vaginal roof, to which it was firmly attached. Bimanual examination showed the small body of the uterus to be continuous with the vaginal tumor which was thus revealed as the whole cervix enormously hypertrophied. The cervical canal was evidently situated in the centre of the tumor, but the external os could not be recognized at the time. (On the specimen it is easily visible as a large cleft

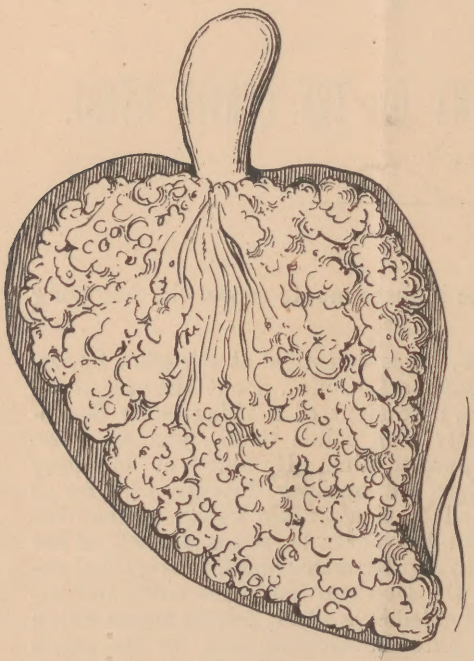

FIG. 1.—Diagrammatic sketch.

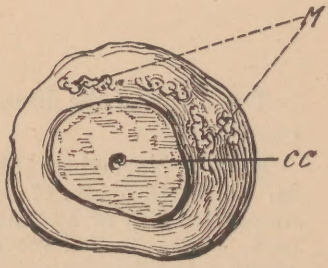

FIG. 2.—Diagrammatic view of stump of cervix after removal of tumor. *cc*, cervical canal; *M*, myxomatous degeneration of vaginal fornix.

near the apex of the tumor, but is not shown on the diagrammatic sketch made after my description of the tumor, although the sketch represents very well the size and relations of the growth.)

During the examination the myxomatous covering of the tumor gushed out in torrents, some of the masses discharged being well-formed oblong globules of yellow color as large as a sweet-water grape. Through a Sims' speculum, I passed a constricteur wire over as much of the tumor as I could, removed it, and then the remainder close to the vaginal vault. The central portion of the growth was so dense in structure that it actually creaked as

the wire cut through it. The whole mass when put together, with the myxoid masses squeezed off during manipulation, measured fully five inches in length by three inches in diameter. At least this was the size of the wire loop required to surround it. To guard against subsequent hemorrhage, I passed two deep silk ligatures through the vaginal vault on either side, and tamponed the vagina tightly. The small sketch shows diagrammatically the stump of the cervix with the orifice of the cervical canal in the centre. In the vaginal vault were several dark patches, from which oozed the same myxoid masses as composed the surface of the tumor.

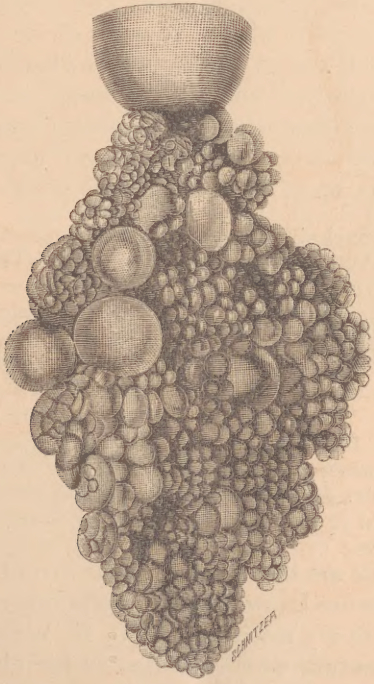

FIG. 3.—(From Thomas.)

The patient, who was anemic to the last degree, reacted well from the chloroform, and made a good recovery so far as the operation is concerned, but, her physician informs me, has at present (January 12th, 1889) failed to regain her strength, and the tumor has grown again to about one-half its size before the operation. Further operative interference has been declined.

The microscopical examination kindly made for me by Dr. Heitzmann shows the following condition: "The tumor from the cervix brought by Dr. Wells for examination a week ago reveals macroscopically quite a large number of cysts; under the microscope it shows myxomatous structure, in the meshes of which are

imbedded a variable number of lymph or adenoid corpuscles. In some places these lymph-corpuscles are breaking up into sarcoma corpuscles, though this change has as yet not advanced very far. There are also present a small number of glands lined by columnar epithelium. The diagnosis therefore is: *Myxo-adenoma* changing to *myxo-sarcoma* in cystic degeneration.

On looking over the literature I found in Thomas' "Diseases of Women," 1880, page 560, a diagram of a similar tumor removed by him (see Fig. 3), which I had overlooked. It differs from mine in seeming to spring from within the cervical canal, while mine involved the whole substance of the cervix. After describing the well-known and common glandular polypus of the cervix uteri (of which small specimens of the size of a bean or even larger have been observed by every physician interested in gynecology, but which I have never seen larger than a hen's egg), Thomas goes on to describe his case as follows:

"The most remarkable instance of this variety with which I have ever met is that represented in Fig. 226. The whole growth measured in length four and a half inches, and in longest diameter two and seven-eighths inches. It filled the vagina completely, grew from the inner wall and lip of the cervix, caused no symptom except leucorrhea and pelvic neuralgia, and was not known to exist until difficulty in sexual intercourse caused the patient to apply for examination. The mass was examined after removal by Dr. F. Delafield and found to consist of enlarged cervical follicles, the grape-like masses shown in the diagram, which was copied from nature by Dr. J. B. Hunter, bound together by connective tissue. I removed it with great ease by the écraseur."

Dr. Thomas tells me that he never heard from the case again, and therefore does not know whether the tumor returned or not.

I am indebted to my associate, Dr. B. H. Wells, for a further search of the literature which resulted in his discovering a recent paper by Ludwig Pernice, of Greifswald, Germany, "On a grape-like Myosarcoma strio-cellulare uteri," published in *Virchow's Archiv*, July 3d, 1888, which records a case almost identical with mine, and gives the scanty literature on the subject.

EXPLANATION OF PLATE.

1. Cervix uteri, with tumor hanging from it; natural size. Sound passed through cervical canal. *L*, line of excision; *a*, *a*, and *b*, berry-like growths; *c*, fragments of delicate epithelial membrane covering a number of the berries.
2. Section of a berry hardened in alcohol (Bénèche, Oc. 3, Obj. 7). *a*, type of stroma; *b*, numerous interlacing striated muscular fibres; *c*, fibres in which the striæ cannot yet be seen; at times, *e*, these fibres are cut transversely.
3. Cells from the third tumor, fresh specimen. *a*, stellate cell with numerous nuclei; *b*, spindle-cells with one long nucleus; at *c* the ends of the spindle fatty; *d*, spindle-cells with several nuclei; *e*, fatty debris with free nuclei, partly fatty.
4. Striated spindle cell from the first tumor.
5. Muscle fibres from a five to six weeks old embryo.

A GRAPE-LIKE MYO-SARCOMA.

STRIOCELLULARE UTERI (PERNICE).

The lithograph accompanying Pernice's paper so graphically illustrates the appearance of the growth and its origin from the *whole* cervix that I have reproduced it (see Plate), a liberty for which I herewith crave the author's pardon, not having had time to ask his permission.

Pernice's case was that of a married multipara (age not given) who some six months before admission to the clinic began to bleed from a tumor which projected from the vagina. On its removal by excision on October 27th, 1886, the tumor was found to spring from the whole vaginal portion of the cervix, portions of which were still healthy; it was of the size of one and a half fists, and closely resembled a bunch of grapes, being covered with bluish-red berries, even into the clefts of the growth, which contained a jelly-like viscid fluid. The cervical canal ran through the whole length of the tumor.

The incisions, which bled very little, were closed by sutures, and the patient left her bed on the tenth day.

The tumor proved to be a "grape-like, soft, highly cellular fibroma (sarcoma), with striated muscular fibres." The latter closely resembled those of a fetus of the tenth week, the shape of both fibres and nuclei having a distinct embryonal type. The berries were composed of soft, edematous connective tissue, with myxomatous degeneration, and numerous spindle-shaped, stellate, or round cells. (For the further details of the microscopical examination, lack of space obliges me to refer to the original.)

Two months later, the patient returned to the clinic with a tumor of the size of a goose-egg, which was removed with the galvano-cautery wire, the peritoneal cavity being accidentally opened. Recovery ensued without a drawback. On September 18th, 1887, or nine months later, the patient was again admitted, but this time for an abdominal tumor reaching nearly to the epigastrium. Laparatomy was performed, but the adhesions were so extensive and the tumor so evidently malignant that the wound was closed. Recovering from the operation, the patient died of pneumonia, probably produced by the pressure of the rapidly growing tumor, a month later. Microscopical examination of the second and third tumors showed them to be a large-celled sarcoma; the myxoid degeneration of the first tumor was absent, although in the second tumor several spots resembled the surface of the first tumor.

A rapid degeneration of the still partially benign adeno-myxomatous structure into pure, large-celled sarcoma is thus visible even at the first recurrence. Certainly this appears to be also the course in my case, which seems to differ from that of Pernice in the greater amount of fibrous tissue composing the centre of the tumor.

Pernice reports six other cases of similar degeneration of the cervix, all he was able to find. He overlooked that of Thomas, and there are, therefore, including mine, nine cases of this singular and destructive disease on record, viz.:

1. *Thiede*,[1] a fibroma papillare cartilaginescens, first composed only of connective tissue and cartilage, but on its return proving rapidly fatal.

2. *Rein*,[2] a "myxoma enchondromatodes colli uteri," resembling a hydatid mole. It returned rapidly after removal, and developed metastatic deposits, which contained myxomatous tissue besides cartilage.

3 and 4. *Spiegelberg*,[3] both similar to that of Rein. One patient was lost sight of, the other died after the removal of the uterus with the tumor, of a return of the disease in the peritoneal cavity. Both tumors were papillary sarcomas of the cervix.

5. *Winkel*,[4] an "adeno-myxo-sarcoma" of the cervix, with a furrowed surface. Rapid fatal return after removal.

6. *O. Weber*,[5] polypoid tumor of cervix; repeated rapid returns; death.

7. Thomas.[6]

8. Pernice.[7]

9. Mundé.

The microscopical descriptions of two of these cases (Thiede and Weber) are so defective as to give rise to some doubt whether they are histologically identical with the distinct myxomatous degeneration characteristic of the other cases.

While ordinary mucous polypi of the cervical canal may give rise to so much menorrhagia and leucorrhea as to eventually debilitate and even exsanguinate the patient, they are not known to become malignant, are easily removable, and do not return.

The lesson to be learned from the cases related in this paper would seem to me, however, to be, that, not knowing *when* a benign mucous polypus or diffuse hyperplasia of the glands of

[1] Zeitschr. f. Geb. u. Gyn., 1877, i., p. 430.
[2] Arch. f. Gyn., 1870, xv., p. 187.
[3] Arch. f. Gyn., 1879, xiv., p. 178; ibid. xv., 437, and xvi., 124, 1880.
[4] Winkel, "Lehrb. der Geburtsh.," 1886.
[5] O. Weber, "Ueber die Bildung quergestreifter Muskelfasern;" Virchow's Archiv, xxxix., p. 216.
[6] L. c.
[7] L. c.

the cervical cavity *may* take on the type of rapid growth and possible eventual malignant degeneration, it behooves us, as a precautionary measure, to remove all mucous polypi, however small, as soon as discovered, and to thoroughly destroy by curette and caustics all diseased glands in the cervical canal.

As shown by the rarity of the cases, such malignant degeneration is fortunately not often to be apprehended. But that it may occur independently of the stimulus of the injuries to the cervix produced by parturition, the most common cause of diseases of the cervix, is shown by my case.

I should mention that two cases of myxomatous degeneration of fibroids of the *body* of the uterus are reported, one by Tait, the other by A. W. Johnstone, of Danville, Ky., in both of which the histological appearances closely resembled that in my case. The condition was only discovered during the removal of the tumor by laparatomy.

CONTRIBUTIONS

TO

MEDICAL LITERATURE.

BY

PAUL F. MUNDÉ.

I.—*Books.*

1. OBSTETRIC PALPATION: The DIAGNOSIS AND TREATMENT OF OBSTETRIC CASES BY EXTERNAL (ABDOMINAL) EXAMINATION AND MANIPULATION. (*Reprint from American Journal of Obstetrics for July and August*, 1879, *and April*, 1880.) William Wood & Co., New York, 1880. Pp. 114, 13 woodcuts. 1880.

2. MINOR SURGICAL GYNECOLOGY: A TREATISE OF UTERINE DIAGNOSIS AND THE LESSER TECHNICALITIES OF GYNECOLOGICAL PRACTICE, INCLUDING GENERAL RULES FOR GYNECOLOGICAL OPERATIONS AND THE OPERATIONS FOR LACERATED CERVIX AND PERINEUM, AND PROLAPSUS OF UTERUS AND VAGINA. For the use of the Advanced Student and General Practitioner. First Edition, *Wood's Library, Dec.*, 1880. Pp. 381, 300 woodcuts. 1880.

Second Edition, Revised and Enlarged, April, 1885. William Wood & Co., New York. Pp. 552, 321 Illustrations. Price $5.00. 1885.

3. APPENDIX TO CAZEAUX AND TARNIER'S SYSTEM OF OBSTETRICS. P. Blakiston, Son & Co., Philadelphia. Pp. 135, 2 lithographic plates and 8 woodcuts. 1886

4. A SKETCH OF THE MANAGEMENT OF PREGNANCY, PARTURITION AND THE PUERPERAL STATE AND THEIR COMPLICATIONS. Geo. S. Davis, Detroit. Pp. 110. 1887

II.—*Minor Articles.*

1. GUNSHOT WOUNDS OF THE PELVIC VISCERA (*Boston Medical and Surgical Journal, Jan.*, 1867), pp. 5. 1867.

2. REPORT OF A CASE OF PARTIAL SPONTANEOUS AMPUTATION OF THE METACARPUS IN UTERO, WITH EXPLANATORY REMARKS (*Boston Med. and Surg. Journ., July 8th*, 1869), pp. 5. 1869.

3. The Radical Operation for Prolapsus Uteri as Practised by Prof. Carl Braun, of Vienna, with a Report of Six Successful Cases (*Am. Jour. Obst., Nov.*, 1871), pp. 16, with 8 woodcuts. 1871.

4. The Treatment of Cancer of the Uterus with the Sharp-edged Scoop, or Curette (*Am. Jour. Obst., Aug.*, 1872), pp. 26. 1872.

5. The Cranioclast as Improved and used by the Vienna School (*Am. Jour. Obst., May*, 1873), pp. 38, with 2 woodcuts. 1873.

6. Retention of the Dead Ovum. (*Am. Jour. Obst., Vol. VIII.*, 1875–76), pp. 11. 1875.

7. A Case of Presumptive True Lateral Hermaphroditism (*Am. Jour. Obst., Feb.*, 1876), pp. 19, with lithographic plate. 1876.

8. Article "Obstetrics" in Johnson's Universal Encyclopedia. 4 columns. 1876.

9. The Reposition of Retro-Displacement of the Gravid Uterus by Posture and Atmospheric Pressure (*Am. Jour. Obst., June*, 1876), pp. 8. 1876.

10. The Influence on the Fetus of Medicines, Particularly Narcotics, Administered to the Mother During Pregnancy and Labor. (*Opening of Discussion in New York Obstetrical Society, Feb. 6th*, 1877; *Am. Jour. Obst.*, 1877), pp. 7. 1877.

11. The Value of Electrolysis in the Treatment of Ovarian Tumors (*Am. Gynecol. Trans.*, 1877, *Vol. II.*), pp. 89. 1877.

12. A Case of Ovariotomy During Subacute Peritonitis and Suppuration of the Cyst Following Aspiration; with Remarks (*Am. Jour. Med. Sciences, Jan.*, 1878), pp. 9. 1878.

13. The Dull Wire Curette in Gynecological Practice (Presented to the Edinburgh Obstetrical Society, January 23d, 1878; *Edinburgh Med. Journ., March and April*, 1878), pp. 15. 1878.

14. Zur Behandlung der Blutungen nach Abort (*Centralbl. für Gynäkologie, No. 6. March*, 1878), pp. 4. 1878.

15. The Indications for Hystero-Trachelorrhaphy, or the Operation for Laceration of the Cervix Uteri (*Am. Jour. Obst., Jan.*, 1879), with two chromo-lithographic plates, pp. 18. 1879.

16. A Successful Case of Intravenous Injection of Beef Peptone for Exhaustion from Hemorrhage from Uterine Cancer (*Am. Jour. Obst., July*, 1879), pp. 5. 1879.

17. Prolapse of the Ovaries (*Am. Gynecol. Trans.*, 1879, *Vol. IV.*), pp. 34. 1879

18. The Diagnosis and Treatment of Obscure Pelvic Abscess in Women, with Remarks on the Differential Diagnosis Between Pelvic Peritonitis and Pelvic Cellulitis (*Archives of Medicine, Vol. IV., No. 3, Dec.*, 1880). 1880

19. Case of Rupture of the Parturient Uterus (*Am. Jour. Obst., April*, 1881), pp. 7, with 4 woodcuts. 1881

20. The Curability of Uterine Displacements (Read before the International Medical Congress in London, in Aug., 1881. *Am. Jour. Obst., Oct.*, 1881), pp. 24. 1881.

21. A Case of Fatal Secondary Hemorrhage after Removal of the Cervix Uteri for Epithelioma with the Galvano-Cautery Wire, Followed by the Sharp Curette and Thermo-Cautery (*Am. Jour. Obst., Supplt., March*, 1882), pp. 2. 1882.

22. Clinical Contributions to Obstetrics and Gynecology (*Am. Jour. Obst., Oct.*, 1882), pp. 30. 1882.

23. The Immediate Removal of the Secundines after Abortion, with Table of 57 Cases (*Am. Jour. Obst., Feb.*, 1883), pp. 15. 1883.

24. Secondary Puerperal Hemorrhage (*Archives of Medicine, Vol. IX., Feb.*, 1883), pp. 18. 1883.

25. The Etiology and Treatment of Certain Forms of Non-Puerperal Uterine Hemorrhage (*Medical Record, Feb. 10th*, 1883), pp. 18. 1883.

26. The Treatment and Curability of Chronic Uterine Catarrh *Medical Record, June 28th*, 1883), pp. 9. 1883.

27. Specialism in Medicine: Introductory Address before the Medical Class of Dartmouth College, Aug. 2d, 1882 (*Atlantic Journal of Medicine, Richmond, Va., Oct.*, 1883), pp. 23. 1883.

28. Non-Puerperal Pelvic Lymphadenitis and Lymphangitis (*Am. Jour. Obst., Oct.*, 1883), pp. 24. 1883.

29. Can Cancer of the Penis be Acquired by Inoculation from Cancer of the Cervix Uteri? (*N. Y. Med. Jour., Oct. 27th*, 1883), pp. 4. 1883.

30. In Memoriam, J. Marion Sims (*Am. Jour. Obst., Jan.*, 1884), pp. 10, with steel plate. 1884.

31. Three Successful Cases of Oöphorectomy (*New England Medical Monthly, Sept.*, 1884), pp. 15. 1884.

32. A Successful Case of Arrest of Tubal Pregnancy by Galvanism (*Medical Record, Sept. 27th*, 1884), pp. 4. 1884.

33. Interstitial Cervical Fibroids as a Cause of Dystocia and their Removal by Vaginal Enucleation (*Am. Gyn. Trans., Vol. IX., Oct.*, 1884), pp. 15. 1884.

34. The Proper Limitation of the Operation of Complete Vaginal Hysterectomy for Cancer of the Uterus (*Am. Gyn. Trans., Vol. IX., Oct.*, 1884), pp. 25. 1884

35. Four Cases of Alexander's Operation of Shortening the Round Ligaments of the Uterus for Retroversion (*New England Medical Monthly, May*, 1885), pp. 10. 1885

36. Two Cases of Dangerous Hemorrhage from Rupture of the Vagina during first Coitus (*Boston Med. and Surg. Jour., May 14th*, 1885), pp. 3. 1885.

37. Electricity as a Therapeutic Agent in Gynecology (*Am. Jour. Obst., Dec.*, 1885), pp. 42. 1885.

38. Zwei Fälle von grossem extraperitonäalem Beckenhämatom, geheilt durch vaginale Incision und Drainage (*New Yorker Medizinische Presse, Dec.*, 1885), pp. 5. 1885.

39. Meine Erfahrung mit der operativen Verkürzung der runden Mutterbänder bei Retroversio Uteri. Sechs Fälle (*New Yorker Medizinische Presse, Januar*, 1886), pp. 6. 1886.

40. The Treatment of Pelvic Abscess in Women by Incision and Drainage; with Reports of Ten Cases (*Am. Jour. Obst., Feb.*, 1886), pp. 26. 1886.

41. Ovariotomy during Acute or Chronic Peritonitis (*Maryland Med. Jour., April 3d*, 1886), pp. 8. 1886

42. Clinical Observations on Reflex Genital Neuroses in the Female (*Jour. Nervous and Mental Disease, March*, 1886), pp. 11. 1886

43. A Glimpse of Laparotomy in Europe (*Am. Jour. Obst., Sept.*, 1886), pp. 33. 1886

44. The Value of Antipyrine in Puerperal Fever (*N. Y. Med. Jour., Oct. 9th*, 1886), pp. 6. 1886

45. A Plea for Intrauterine Medication (*N. Y. Med. Jour., Febr. 5th*, 1887), pp. 13. 1887

46. Three Cases of Pregnancy complicated by Ovarian Tumors, Ovariotomy, Recovery (*N. Y. Med. Jour., Aug. 6th*, 1887), pp. 11. 1887

47. Zur Kasuistik des totalen Mangels der Gebärmutter bei normaler Vagina und einer seltenen Zwitterbildung (*Zentralblatt f. Gyn.*, No. 42, 1887), pp. 2. 1887

48. Zur Behandlung der Fibroide inter partum (*Ibid.*), pp. 2. 1887

49. Drainage after Laparotomy (*Amer. Gynecol. Trans., Sept.*, 1887, *vol. XII.*), pp. 18. 1887

50. A Year's Work in Laparotomy.—Forty-Five Operations (*Am. Jour. Obst., Jan. and Febr.*, 1888), with four photo-engraved plates, pp. 47. 1888

III.—*Cases.*

Reported in the Transactions of the New York Obstetrical Society, and published in the *Am. Journ. Obst.*, 1873 to 1886. 1873 to 1886.

IV.—*Annual Reports on Gynecology.*

1. Report on Diseases of Women for the Year 1874 (*Am. Jour. Obst.*, 1875), pp. 31. (Translated into French for the *Annales de Gynécologie*, 1875.) 1875.

2. Report on the Progress of Gynecology during the Year 1875 (*Am. Jour. Obst.*, 1876), pp. 47. (Translated into French for the *Annales de Gynécologie*, 1876.) 1876.

V.—*Reviews and Abstracts.*

Numerous Reviews (Schroeder, Barker, Playfair, Byford, Hewitt, Leblond, Ahlfeld, Bantock, etc.). 1873

Numerous abstracts, published in the *American Journal of Obstetrics.* to 1885.

And in the *Centralblatt für Gynäkologie.* 1877 to 1880.

20 West 45th Street,
New York,
February, 1888.